ABSTRACT OF THE DISCLOSURE

A programmable logic analyzer data analyzing method includes the step of controlling a control circuit to fetch waveform data from the test sample and to store fetched waveform data in a memory, the step of controlling the control circuit to transmit the waveform data from the memory to a computer through a transmission interface when the memory space of the memory used up (fully occupied), the step of driving the computer to write the received waveform data in a buffer thereof, and the step of running a test sample test signal auxiliary analyzing procedure for enabling the user to use the displayed on the display screen of the computer for making debugging data analysis, comparison data analysis and search data analysis, to store the analyzed data in the form of a file, or to print out the analyzed data through a printer.